

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 6

### REMARKS

Claims 15-33 are pending in the present application. Reconsideration is respectfully requested for the following reasons.

Claims 28 and 33 have been objected to for including informalities. Claims 28 and 33 have been amended as suggested by the Examiner and Applicant submits that the objection is now obviated.

Claims 28-33 have been rejected under 35 U.S.C. §102(b) as being anticipated by Japanese Patent Publication No. 08/279,242 to Kanouda. "Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, *arranged as in the claim.*" *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 221 USPQ 481, 485 (Fed. Cir. 1984) (emphasis added). In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of anticipation based upon the prior art. *In re Sun*, 31 U.S.P.Q.2d 1451, 1453 (Fed. Cir. 1993) (unpublished). Applicant respectfully asserts that the Examiner has not yet met his burden of establishing a prima facie case of anticipation with respect to the rejected claims.

Claim 28 defines a device for at least one of reading and writing to a compact disc, comprising a hub configured to retain the compact disc. At least one propeller is attached to the hub. The at least one propeller is extending radially outwardly from the hub. An actuator is coupled to the hub and configured to rotate the hub such that the at least one propeller moves air about the compact disc. The device also includes a read/write head. A radially outermost tip of the at least one propeller is closer to the hub in a radial direction than is the read/write head.

The prior art of record does not disclose or suggest the above noted features of claim 28. Specifically, the Kanouda '242 publication does not disclose a read/write head wherein a radially outermost tip of at least one propeller is closer to a hub in a radial direction than is the read/write head, along with the remaining features of claim 28. According to the Office Action, the Kanouda '242 publication inherently teaches a radially outermost tip of at least one propeller that is closer to a hub in a radial direction than is a read/write head. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 7

establish the inherency of that result or characteristic." M.P.E.P. § 2112; *In re Rijchaert*, 28 U.S.P.Q.2d 1955, 1957 (Fed. Cir. 1993). "In relying upon the theory of inherency, the Examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. and Inter. 1990) (emphasis original).

However, the Kanouda '242 publication does not necessarily teach a radially outermost tip of at least one propeller that is closer to a hub in a radial direction than is a read/write head. Since a read/write head is not disclosed in the Kanouda '242 publication, the Kanouda '242 publication does not inherently teach the position of any read/write head. For example, a read/write head could be positioned above in a compact disc and be located closer to the hub in a radial direction than an outermost tip of at least one propeller. Accordingly, claim 28 is in condition for allowance.

Claim 29 defines a device for at least one of reading and writing to a compact disc, comprising at least one propeller attached to the hub. The at least one propeller extends radially outwardly from the hub. An actuator is coupled to the hub and configured to rotate the hub such that the at least one propeller moves air about the compact disc. The at least one propeller has a pitch such that air is moved toward the compact disc when the actuator rotates the hub.

The prior art of record does not disclose or suggest the above noted features of claim 29. Specifically, the Kanouda '242 publication does not disclose or suggest at least one propeller that has a pitch such that air is moved towards a compact disc when an actuator rotates a hub along with the remaining features of claim 29. As illustrated in Fig. 2 of the Kanouda '242 publication, the turn table 13 moves in a clockwise direction. Since the highest part of the blade part 15 is at a front of the direction of rotation, the blade part 15 will move air away from a compact disc. Accordingly, the Kanouda '242 publication does not include all of the features of claim 29. Therefore, claim 29 is in condition for allowance.

Claim 30 defines a device for at least one of reading and writing to a compact disc, comprising a hub configured to retain the compact disc, a plurality of propellers attached to the

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 8

hub and an actuator coupled to the hub and configured to rotate the hub such that the at least one propeller moves air about the compact disc. The plurality of propellers each include a top surface and a bottom surface, with the bottom surfaces facing the actuator and topmost points on each of the top surfaces of the plurality of propellers defining a plane. The hub has an axis of rotation and the plane is nonperpendicular to the axis of rotation.

The prior art of record does not disclose or suggest the above noted features of claim 30. The Kanouda '242 publication does not disclose or suggest a plurality of propellers each including a top surface and a bottom surface, with the bottom surfaces facing an actuator and topmost points on each of the top surfaces of the plurality of propellers defining a plane, with the hub having an access of rotation and the plane being non-perpendicular to the axis of rotation, along with the remaining features of claim 30. The topmost points of each of the blade parts 15 of the Kanouda '242 publication define a plane that is perpendicular to the axis of rotation of the hub. Accordingly, claim 30 is in condition for allowance.

Claims 31-33 depend from claim 30, and since claim 30 defines unobvious patentable subject matter as discussed above, claims 31-33 define patentable subject matter. Furthermore, in regard to claim 31, the prior art of record does not disclose or suggest an angle between the plane and the axis of rotation being approximately 60° and 89°. As stated above in regard to claim 30, the Kanouda '242 publication has a plane that is perpendicular to an axis of rotation. Moreover, in regard to claim 33, the prior art of record does not disclose or suggest a read/write head wherein a radially outermost tip of the plurality of propellers is closer to the hub in a radial direction than is the read/write head as discussed above in regard to claim 28. Accordingly, claims 31-33 are in condition for allowance.

Claims 15, 17-20, 23, 24, 26 and 27 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Application Publication No. 2001/0015951 to Yabushita in view of Japanese Patent Publication No. 01-171144 to Okamoto. The requirements for making a *prima facie* case of obviousness are described in MPEP §2143 as follows:

In order to establish a *prima facie* case of obviousness, three criteria must be met. M.P.E.P. § 706.02(j). Firstly, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 9

available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Secondly, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Thirdly, the prior art reference (or references) must teach or suggest all the claim limitations. *In re Royka*, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. *In re Fritch*, 23 USPQ 2d 1780, 1783 (Fed. Cir. 1992); M.P.E.P. §2142. Applicants respectfully assert that the Examiner has not yet met the Examiner's burden of establishing a prima facie case of obviousness with respect to the rejected claims. Consequently, the Examiner's rejection of the subject claims is inappropriate, and should be withdrawn.

Claim 15 defines a method for processing a compact disc comprising placing the compact disc on a rotatable hub such that a throughhole of the compact disc receives the hub, engaging the compact disc with a fan device such that the compact disc is biased farther onto the hub, attaching the fan device to the hub and rotating the hub such that the compact disc and the fan device also rotate. The fan device moves air about the compact disc to thereby carry heat away from the compact disc.

The prior art of record does not disclose or suggest the above noted features of claim 15. First, if the fan 11 of the Okamoto '144 publication was substituted for the clamper 14 of the Yabushita '951 publication, the clamping section 28 of the clamper 14 would no longer be in the combination, such that the disc-shaped medium would no longer be clamped and therefore would not properly turn with the turntable 12. Accordingly, the Yabushita '951 publication teaches away from any such combination as set forth in the Office Action.

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 10

Second, even if there was a suggestion or motivation for combining the Yabushita '951 publication with the Okamoto '144 publication, any resulting combination will not include engaging a compact disc with a fan device such that the compact disc is biased further onto the hub along with the remaining features of claim 15. According to the Office Action, such a feature is disclosed in Figs. 4-7 and paragraph 14 of the Yabushita '951 publication. However, paragraph 14 of the Yabushita '951 publication only states that a disc-shaped medium is moved close to the clamper 14 and clamped between the turntable 12 and the clamper 14. The Yabushita '951 publication does not state that the clamper biases a compact disc further onto a hub with the clamper. The disc-shaped medium is only moved closer to the clamper, not the turntable 12, as disclosed in the Yabushita '951 publication. Accordingly, claim 15 is in condition for allowance.

Claims 16-22 depend from claim 15, and since claim 15 defines unobvious patentable subject matter as discussed above, claims 16-22 define patentable subject matter. Moreover, in regard to claims 17 and 18, the prior art of record does not disclose or suggest a rotating step that includes blowing air towards or drawing air away from a compact disc. The fan 11 of the Okamoto '144 publication is not disclosed as blowing air towards or drawing air away from a compact disc. Furthermore, the Okamoto '144 publication teaches to blow air towards a magnetic head 7 (see second full paragraph of page 3 of the Okamoto '144 publication). Therefore, the Okamoto '144 publication teaches away from blowing air towards a compact disc as claimed in claim 17 or drawing air away from a compact disc as claimed in claim 18. Moreover, in regard to claim 19, the prior art of record does not disclose or suggest an engaging step that includes a compression arm to push a fan into engagement with a compact disc. In the combination as set forth in the Office Action, the clamper 14 is substituted for a fan. Therefore, the Yabushita '951 publication does not include the clamper 14. Furthermore, in regard to claim 20, the prior art of record does not disclose or suggest a compression arm that is integrally formed with a fan device. As stated above in regard to claim 19, the combination as set forth in the Office Action does not include any compression arm. Accordingly, claims 16-22 are in condition for allowance.

Claim 23 defines an apparatus for cooling a compact disc comprising a rotatable hub

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 11

having a first end and a second end, with the first end of the hub being configured to accept a compact disc thereon by inserting the first end of the hub into a throughhole of the compact disc, an actuator configured to rotate the rotatable hub, and a fan device driven by the actuator and configured to move air about the compact disc. The fan device is configured to move relative to the hub.

The prior art of record does not disclose or suggest the above noted features of claim 23. Specifically, as discussed in regard to claim 15 above, there is no suggestion or motivation for combining the Yabushita '951 publication with the Okamoto '144 publication. Accordingly, claim 23 is in condition for allowance.

Claims 24-27 depend from claim 23, and since claim 23 defines unobvious patentable subject matter as discussed above, claims 24-27 define patentable subject matter. Moreover, in regard to claims 26 and 27, the combination as set forth in the Office Action does not include any compression arm as discussed above in regard to claims 19 and 20. Accordingly, claims 24-27 are in condition for allowance.

Claims 16, 21, 22 and 25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over the Yabushita '951 publication in view of the Okamoto '144 publication and "Applicant's admitted prior art." The standard for rejecting a claim as being obvious is outlined above.

Claims 16, 21 and 22 depend from claim 15, and since claim 15 defines unobvious patentable subject matter as discussed above, claims 16, 21 and 22 define patentable subject matter. Furthermore, in regard to claim 16, the prior art of record does not disclose or suggest an attaching step that includes placing a fan device on a hub such that a through hole of the fan device receives the hub with a friction fit. According to the Office Action, Applicant's specification discloses placing a clamping member on a hub such that a through hole of the fan device receives the hub with a friction fit in paragraph 29. However, paragraph 29 states that a compression arm pushes a compact disc, not a fan device, onto a hub such that a through hole of the compact disc receives the hub with an interference fit. Therefore, the prior art cited in the Office Action does not include or suggest all of the features of claim 16. Moreover, in regard to claim 21, the prior art of record does not disclose or suggest an

Applicant : Robert W. Hjelmeland  
Appln. No. : 10/797,417  
Page : 12

attaching step that includes using a compression arm to push a fan device onto a hub with a friction fit. As discussed above in regard to claim 16, the prior art of record does not disclose or suggest pushing a fan device onto a hub with a friction fit. Likewise, in regard to claim 22, the prior art of record does not disclose or suggest a compression arm that is integrally formed with a fan device. As discussed above, the combination to reject claim 22 as set forth in the Office Action would not include a compression arm. In regard to claim 25, claim 25 depends from claim 23, and since claim 23 defines unobvious patentable subject matter as discussed above, claim 25 defines patentable subject matter. Furthermore, as discussed above in regard to claims 16 and 21, the prior art of record does not disclose or suggest inserting a through hole of a fan device onto a rotatable hub in a friction fit such that the fan device rotates with the rotatable hub. Accordingly, claims 16, 21, 22 and 25 are in condition for allowance.

All pending claims 15-33 are believed to be in condition for allowance, and a Notice of Allowability is therefore earnestly solicited.

Respectfully submitted,

April 30, 2007

Date

/Marcus P. Dolce/

Marcus P. Dolce, Registration No. 46 073  
Price, Heneveld, Cooper, DeWitt & Litton, LLP  
695 Kenmoor, S.E.  
Post Office Box 2567  
Grand Rapids, Michigan 49501  
(616) 949-9610

MPD/msj